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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,626	09/29/2003	Takuya Hamada	HAMA3005/EM	6229

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EXAMINER

SANTIAGO, MARICELI

ART UNIT PAPER NUMBER

2879

DATE MAILED: 08/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/671,626

Applicant(s)

HAMADA ET AL.

Examiner

Mariceli Santiago

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/8/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2 and 4-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4, 6 and 7 is/are allowed.
- 6) ☒ Claim(s) 2, 5 and 8 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/29/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The Amendment, filed on June 8, 2006, has been entered and acknowledged by the Examiner.

Cancellation of claims 1 and 3 has been entered.

Claims 2 and 4-9 are pending in the instant application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2 and 5 rejected under 35 U.S.C. 102(b) as being anticipated by Kagami et al. (US 4,275,333).

Regarding claims 2 and 5, Kagami discloses a fluorescent display device wherein light is emitted by impinging a low speed electron beam on a phosphor layer formed on an anode, wherein the phosphor layer comprises a phosphor ($\text{Ln}_2\text{O}_2\text{S:Re}$, Column 4, lines 25-30) and a compound containing at least one of P, K and Na (phosphate phosphor, Column 4, lines 13-14).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada et al. (US 6,690,119) in view of Kagami et al. (US 4,275,333).

Regarding claim 8, Hamada discloses a phosphor paste comprising a phosphor and a first compound selected from P_2O_6 (Column 2, lines 12-19). Hamada exemplifies a phosphor paste further comprising another compound of a conductive oxide, such as ZnO, In_2O_3 , however, it fails to disclose such composition being a compound of W. In the same field of endeavor, Kagami discloses a phosphor layer further comprising a conductive oxide compound, such as tungsten oxide (WO_3), indium oxide (In_2O_3) and zinc oxide (ZnO), included in the phosphor composition in order to increase the luminance of the phosphor (Column 3, lines 46-68). Accordingly, it would have been obvious to one of ordinary skills in the art at the time the invention was made to provide a conductive oxide of WO_3 as disclosed by Kagami instead of the ZnO or In_2O_3 compounds disclosed by Hamada in order to increase the luminance of the phosphor layer composition, since the selection of any of these known equivalents would be considered within the level of ordinary skill in the art.

Allowable Subject Matter

Claims 4, 6 and 7 are allowed over the prior art of record.

Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 4, 6, 7 and 9, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claims 4, 6, 7 and 9, and specifically

comprising the limitation of a compound containing at least one selected from the group consisting of K_3PO_4 , $NaPO_3$ and Na_2SiO_3 , wherein the compound being added in an amount of 0.01 to 10.00 wt% to the phosphor.

Response to Arguments

Applicant's arguments with respect to claims 2 and 5 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed with respect to claim 8, have been fully considered but they are not persuasive.

Applicant's contends that the prior art references to Hamada et al. (US 6,690,119) in view of Kagami et al. (US 4,275,333) fails to teach the compound claimed in the amended claims, the compound being selected from the group consisting of K_2PO_4 , $NaPO_3$ and Na_2SiO_3 , however, it is notices that the compound are not claimed in claim 8. Claim 8 states a phosphor paste comprising a phosphor and a first compound containing at least one of P, K and Na, the limitations are considered to be disclosed by Hamada.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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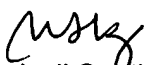
CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariceli Santiago whose telephone number is (571) 272-2464. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Mariceli Santiago
Primary Examiner
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